**AMENDMENTS TO THE SPECIFICATION:**

*Please amend the paragraphs beginning at page 1, line 13, and continuing to page 1, line 25, as follows:*

In order to enable almost seamless services for the end-users, third generation mobile terminals are equipped with so called dual RAT, e.g. both WCDMA (Wideband Code-Division Multiple Access) and GSM technology (Global System for Mobile communications) i.e. TDMA, whereby the mobile terminal is able to communicate with both RATs. Likewise, the mobile terminal and the radio access network have to be able to support handover between the two technologies.

Handover between networks utilizing different RAT require that a dual-mode user equipment or mobile terminal, while communicating over a first radio access network utilizing a first RAT, ~~has to~~ perform measurements on neighboring cells in a second radio access network utilizing a second RAT.

Depending on the type of network, either the mobile terminal itself decides when to change from one cell to another, or the decision is performed at a network node such as a base station controller in the first network. The later case suggests that the mobile terminal has to report some measured parameters to ~~the~~ a base station.

*Please amend the paragraph beginning at page 2, line 11, and continuing to page 2, line 12, as follows:*

A general object of the present ~~invention~~ technology is to provide an improved handover between different radio access technologies.

*Please amend the paragraphs beginning at page 2, line 20, and continuing to page 3, line 14, as follows:*

The above mentioned objects and other objects are achieved with the present ~~invention~~technology .

~~The~~ An ~~main~~ aspect of the present technology~~invention~~ is to enhance the UTRAN/WCDMA measurements in the Measurement result message sent from a multi-RAT mobile, so that both a first parameter e.g. the Ec/No value, and a second parameter e.g. the RSCP value, are included. The base station controller will then have the possibility to use both measures to make an optimal UTRAN handover decision. This will make the handover performance more optimized and stable during traffic load variations.

~~The~~ An advantage of this technology~~invention~~ is that the handover to UTRAN decision will be optimized. The decision will be more independent of the traffic load situation, and the implementation can be made in such a way that the operator can select to trigger UTRAN handover based on Ec/No measurements, RSCP measurements, or both.

This technology~~invention~~ improves the reporting from Mobile Stations/User Equipment sent to the BSC in GSM mode, by including both quality and Signal strength measurements of WCDMA/UTRAN neighbors.

Advantages of the present technology~~inventions~~ include:

- Improved measurement report
- Stable handover
- Optimized handover decision
- Prevented ping-pong handover

*Please amend the paragraph beginning at page 3, line 21, and continuing to page 3, line 22, as follows:*

Fig. 1 is a schematic block diagram of a communication system in which ~~the present invention~~an example embodiment can be utilized,

*Please amend the paragraph beginning at page 3, line 25, and continuing to page 3, line 30, as follows:*

Fig. 3 is a flow diagram of ~~an embodiment of~~ a method according to ~~the invention~~an example embodiment ,

Fig. 4 is a schematic block diagram of an embodiment of a mobile equipment according to ~~the invention~~an example embodiment, and

Fig. 5 is a schematic block diagram of an example embodiment of a node in a radio access network ~~according to the invention~~.

*Please amend the paragraph beginning at page 4, line 14, and continuing to page 4, line 15, as follows:*

In order to fully appreciate the merits of the present technology~~invention~~ a more in-depth identification and description of the problems with prior art will be described below.

*Please amend the paragraphs beginning at page 4, line 24, and continuing to page 5, line 4, as follows:*

According to prior art, an existing dual-mode mobile terminal or user equipment 3 measures and reports only the UTRAN quality measure CPICH Ec/No of neighboring UTRAN cells when communicating in GSM mode. (Ref. 3GPP 04.18.) The existing GSM measurement report is used and the measured CPICH Ec/No value is reported for one or more UTRAN cells.

Referring to FIG.2, the present technology~~invention~~ is based on the recognition that the existing solution, where the user equipment 3 reports only the Ec/No values, has some important drawbacks. The main problem is that the $E_c$/No and the RSCP values have little or no correlation, but are both important for the quality.

*Please amend the paragraphs beginning at page 6, line 1, and continuing to page 7, line 4, as follows:*

In order to overcome the above mentioned problem, and provide a more stable handover for GSM to UTRAN the present technology~~invention~~ proposes a solution wherein also the RSCP value is measured and reported to the base station controller of the first radio access network.

An example embodiment of a method ~~according to the invention~~ will be described with reference to FIG.1 and FIG. 3.

According to the example embodiment~~invention~~, the measured first parameter comprises information relating to the quality of the received signal at the user equipment 3. Preferably, the first parameter represents the energy per chip over noise (Ec/No). Also, according to the example embodiment~~invention~~, the second parameter comprises information relating to the strength of the received signal at the user equipment 3. Preferably, the second parameter represents the received signal code power (RSCP).

In a second ~~step~~ act S2, the mobile terminal 3 reports the measured first and second parameters for each neighboring UTRAN cell 20 to the GSM base station controller 10. According to a first example embodiment ~~of the invention~~, the mobile terminal 3 reports both parameters for each cell at the same time. According to another example embodiment ~~of the invention~~, the mobile terminal 3 reports the values alternately to the base station controller 10.

In a third ~~step~~ act S3; the base station controller 10 receives the measured first and second parameters for each neighboring UTRAN cell 21.

Subsequently, in a fourth ~~step~~ act S4, ~~according to the invention,~~ the node or base station 10 or typically the base station controller, based on the received first and second parameters selects which UTRAN cell 20 from the plurality of neighboring UTRAN cells 20 that should be the target cell and consequently receive the handover.

*Please amend the paragraphs beginning at page 7, line 10, and continuing to page 7, line 11, as follows:*

Consequently, in a fifth ~~step~~ act S5, the base station controller 10 initiates the handover to said selected target UTRAN cell 20.

*Please amend the paragraphs beginning at page 7, line 15, and continuing to page 7, line 27, as follows:*

Conventional procedures for handover and synchronization are not part of the ~~invention~~invention embodiment, and therefore not described in any detail.

According to another example embodiment of the method ~~according to the invention,~~ the reporting ~~step~~ act S2 is performed by including the measured parameters in a measurement report (as defined by 3GPP-standard), such as the Measurement Report of 3GPP TS 04.18.

The existing Measurement Report message specified in the 3GPP TS 04.18 includes fields for GSM RXQUAL values, or UTRAN/WCDMA Ec/No values. The message can, according to the technology~~invention~~, be modified to include both Ec/No and RSCP, or alternating Ec/No or RSCP values. The RXLEV-NCELL n field (where 'n' is one of the 6 reported neighbors) consists of 6 bits. See Table1 below.

*Please amend the paragraph beginning at page 9, line 3, and continuing to page 9, line 6, as follows:*

According to one example embodiment ~~of the method according to the invention~~, both Ec/No and RSCP values are included in the Measurement Report. The 6 bits (below called B'0-B'5) in the RXLEV-NCELL n field are enough to include both relevant Ec/No values and relevant RSCP values, if a limited value range for each parameter is used.

*Please amend the paragraph beginning at page 10, line 13, and continuing to page 10, line 14, as follows:*

According to another example embodiment of a method ~~according to the invention~~, alternating Ec/No and RSCP values are included in the Measurement report.

*Please amend the paragraph beginning at page 11, line 9, and continuing to page 11, line 25, as follows:*

FIG. 4 illustrates an example embodiment of a user equipment ~~according to the invention~~. The user equipment 3 is equipped with multi-RAT capabilities 30, e.g. GSM/TDMA and UTRAN/WCDMA. Further, the user equipment 3 comprises means 31 for measuring first and second (quality) parameters for neighboring UTRAN cells 20, and means 32 for reporting the measured parameters to a node such as a base station or base station controller 10 of a first network 1. In practice, the reporting means 32 are provided as part of an I/O unit.

The reporting means 32, according to a first example embodiment, ~~are~~ is adapted to report both parameters at the same time. According to another embodiment of a user equipment 3, the reporting means 32 ~~are~~ is adapted to report the first and second parameters alternately.

In a preferred embodiment, the Measurement Result Report contains an indication whether the user equipment 3 can report Ec/No and RSCP simultaneously or alternating. This can, for instance, be implemented through a minor addition to the Classmark Change message specified in the 3GPP TS 04.18 and 24.008.

*Please amend the paragraphs beginning at page 12, line 7, and continuing to page 12, line 15, as follows:*

The receiving means 40, according to a first example embodiment ~~according to the invention~~, ~~are~~ is adapted for receiving said first and second parameters at the same time.

According to said first example embodiment, the selecting means 41 ~~are~~ is adapted for selecting a target cell based on first and second parameters received at the same time. Preferably, said parameters are Ec/No and RSCP for a UTRAN cell.

Typically, the reporting means 40 ~~are~~ comprises an I/O unit, which also is adapted to command the handover.

*Please amend the paragraphs beginning at page 12, line 20, and continuing to page 13, line 3, as follows:*

According to a second example embodiment, the receiving means 40 ~~are~~ is adapted for receiving said first and second parameters alternately. Consequently, the selecting means 41 ~~are~~ is adapted for selecting a target cell based on alternately received first and second parameters. Preferably, said parameters are Ec/No and RSCP.

A major advantage of this technology~~invention~~ is that decisions on handover to UTRAN will be optimized. The decision will be more independent of the traffic load situation, and the implementation can be made in such a way that the operator can select to trigger GSM to UTRAN handover based on Ec/No measurements, RSCP measurements, or both.

The technology~~invention~~ has primarily been discussed in the context of a handover of a dual-mode mobile terminal or user equipment from a GSM network to an UTRAN network. However, the technology~~invention~~ is equally applicable to handover from any type of network i.e. WLAN, CDMA2000 to a network utilizing WCDMA. Also, it is equally applicable to a multi-mode user equipment.